



**SUPPLIER SELECTION PROCESS:
FAR EAST CASE STUDY FOR
MML-IMPORTS LTD.**

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Degree Programme in International Business
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ABSTRACT

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Supplier Selection Process: Far East Case Study for MML-Imports Ltd.

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MML-Imports Ltd. is a small import company based in Turku, Finland. The company imports construction tools, -materials, and -accessories from all over the world. An earlier study conducted by the company showed a great potential for importing from the Far East. The Thesis was commissioned by the company's CEO for the purpose of locating suitable suppliers from the Far East with the intention of establishing business relations. In addition, to ensure coherent purchasing practices throughout the company, the need for a supplier selection process and a purchasing process was identified. With support of relevant theories, a supplier selection process for the company was created in parallel with the task of locating suitable suppliers from the Far East. Extending this process into a complete purchasing process, however, falls outside the scope of this Thesis.

The methods which were employed in this Thesis included searching and browsing the Internet, contacting companies in the Far East for information, consulting professionals, and reading books from the university library.

The Thesis will serve as a learning material for anyone new to MML's purchasing team.

A confidentiality agreement has been made between MML and the university; hence some parts are excluded from public viewing. These parts are Chapters 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 8, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7 and 9.8.

Key words: Purchasing, supplier selection process, purchasing process.

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1 INTRODUCTION

1.1 Background

MML-Resources Ltd. is a limited liability partnership registered in Tampere, Finland. It was founded in 2007 by Henri Memonen, Tuomas Lehtovaara and Thumas Miilumäki. Initially the company operated only within the consulting and human resources sectors. MML's mission is to offer a large variety of high quality products and services for the infrastructure building-, construction-, harbour-, and shipyard industries. Customers find fulfilment for their different needs from one place. (von Wietersheim 2011, 5.)

In 2009 research into importing construction tools, -materials and -accessories from around the world to Finland began and is still ongoing. The research indicated a great potential for importing from the Far East. Sales for imported products launched in January 2010. (von Wietersheim 2011,7.) The company offers importing services with auxiliary business name MML-Imports Ltd.

The primary task in importing services is finding and bringing in goods from abroad for MML's clients, i.e. businesses or individuals in Finland. The author of this Thesis has been assigned to work as a member of the company's purchasing team and carry out the task of locating suitable suppliers from the Far East for a selection of new products as requested by MML's clients.

At this stage most of the purchasing decisions are solely made by MML's CEO, Henri Memonen. The company is expanding at a steady rate and has yet to establish a company-wide "protocol" for carrying out purchasing operations (which include everything from obtaining the right product from the right place at the right price to post-transaction management). This is especially problematic to any new employees who are unfamiliar with how purchasing decisions are made in MML. Having a company-wide protocol in place will make sure all purchasing decisions are consistent throughout the company and purchasing operations are running smoothly. In this case *protocol* is best interpreted as logical steps required for performing the company's purchasing operations. Moreover, following a formal process guarantees that every step is covered and nothing is forgotten.

1.2 Goals of the Thesis

As a premise for this Thesis, MML's need for a defined *protocol* for purchasing operations has been identified. This Thesis will however mainly focus on activities before the actual purchase order is placed, as there is no certainty whether any of the product cases (which the author's work will be based on) will progress that far. The activities do cover the most important parts of the entire purchasing operations. The following goals have been set:

- To locate suitable suppliers from the Far East for a selection of products, and in parallel with this work:
- To develop an effective supplier selection process for MML.
- To also address contracting and ordering activities in MML.

1.3 Research method

The author has organised the Thesis into 7 chapters:

Chapter 1

The first chapter essentially prepares its readers for upcoming chapters.

Chapter 2

The second chapter is the **Theory Part**; it contains all theories relevant to MML's purchasing operations. One particular theory plays a significant role throughout this Thesis, i.e. Dr. Arjan van Weele's purchasing process model. The model acts as a starting point for developing MML's supplier selection process.

Secondary research method is deployed for this chapter. Most of the materials are from the university library's collections. A smaller portion of the materials are from reliable websites on the Internet and the university's e-library.

Chapter 3

The third chapter is the **Analytical Part** which involves taking Dr. Arjan van Weele's theory of purchasing process model and analysing it against MML's purchasing operations. This leads to MML's supplier selection process being developed. The layout of the third chapter has been organised in the same order as van Weele's purchasing process model.

Information relevant to MML's purchasing operations is obtained via phone calls and emails to the company's CEO.

Chapters 4, 5 and 6

Chapters four, five and six are the **Application Part**, entailing three individual product cases (handled by the author) from MML. The chapters are organised in the following order: determining specification, selecting supplier, and finally, ordering and contracting.

Both primary and secondary research methods are used across the chapters. Secondary research methods such as trade portals, Google Web Search and books are deployed to assist the author proceed with the individual cases. Then enquiries are made directly to companies via emails and phone calls in order to obtain primary data such as quotations and trade terms. For details on research methods of the individual cases, please see Chapter 5.

Chapter 7

The seventh chapter is the conclusion which essentially sums up everything in the previous chapters. The author also includes her own opinion and recommendations in this chapter.

2 PURCHASING

2.1 Overview

Readers might wonder why purchasing is the first relevant theory to be introduced? Before looking into supplier selection process, in the author's opinion it is worthwhile to understand the basics first. In essence, supplier selection process is a part of purchasing process. Purchasing process illustrates the steps required for completing purchasing from start to finish.

Purchasing is increasingly recognised by top managers as key business driver. Most companies today spend more than half of their sales turnover on purchased parts and services, which means purchasing decisions fundamentally affect business success. (van Weele 2010, 3-14). As an important aspect of purchasing, managing efficient and constructive relationships with suppliers are key to the company's short-term financial position and long-term competitive power (van Weele 2010, 3).

So what does purchasing mean? According to van Weele (2010, 8) terms like purchasing, procurement, sourcing and supply management are used interchangeably in practice. In his book *Purchasing and Supply Chain Management*, purchasing has been defined as

The management of the company's external resources in such a way that the supply of all goods, services, capabilities and knowledge which are necessary for running, maintaining and managing the company's primary and support activities is secured under the most favourable conditions. (van Weele 2010, 8.)

While the definition itself is self-explanatory, what does it mean by "secured under the most favourable conditions"? When deciding where to purchase the goods from, it is purchasing personnel's job to evaluate all possibilities carefully before selecting the ideal one. The decision will ultimately have a positive impact on the company.

It is fair to say that purchasing personnel can contribute a great deal not only to the company's bottom line, but also to its top line.

2.2 Purchasing process model

Although a number of purchasing process models can be found on the Internet or in various academic sources, the author believes that Dr. Arjan van Weele's model is far more comprehensive and applicable to MML. Not only the model provides a starting point for developing MML's supplier selection process, it shows necessary steps and activities to be executed by purchasing personnel in order to complete purchasing. Moreover, basic steps for managing efficient and constructive relationships with suppliers have also been incorporated into the model (see SRM – Supplier Relationship Management in Figure 1).

The model begins with a request sent from internal customer (e.g. spare parts department) to the company's purchasing department. Then a series of logical steps for carrying out the purchasing are clearly identified in the model (Figure 1).

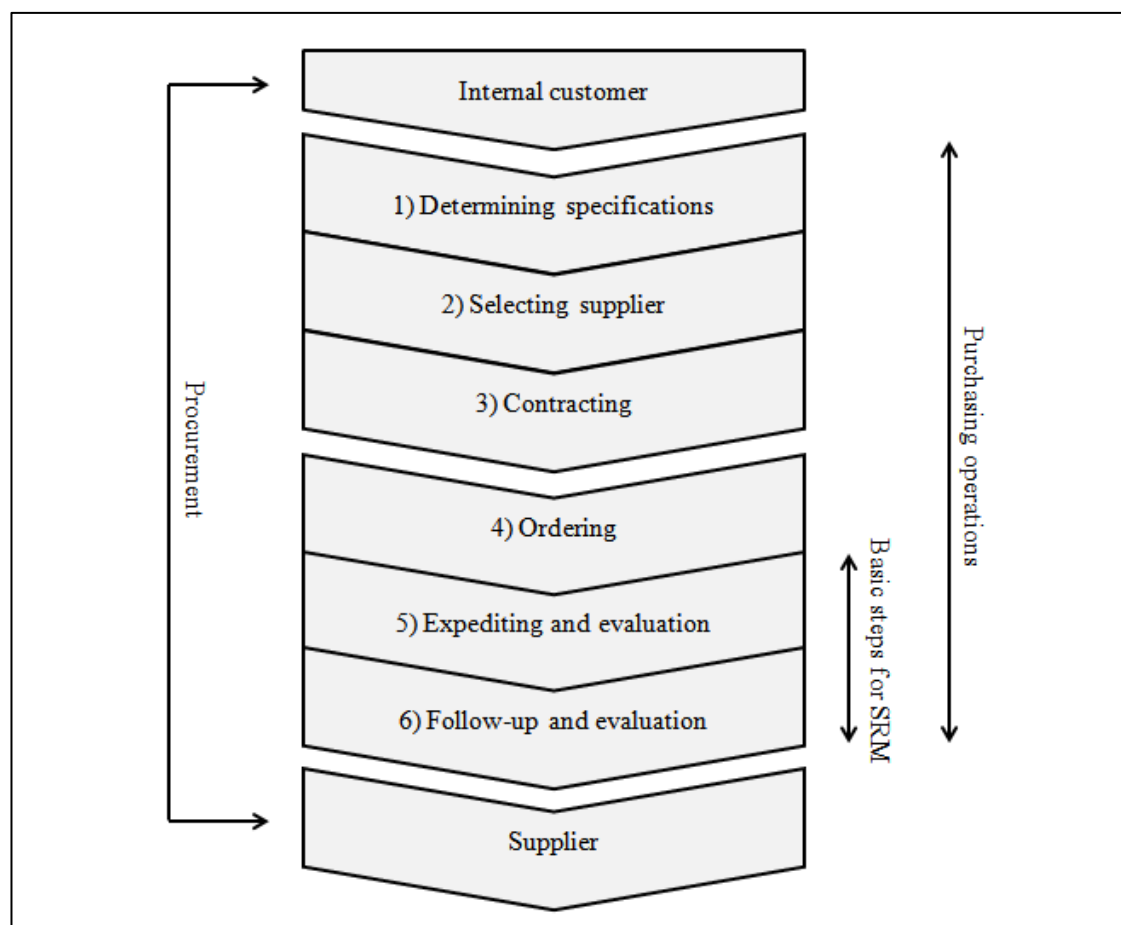


FIGURE 1. Purchasing process model (van Weele 2010, 9). Modified (Koivisto, 2011).

As shown in Figure 1, purchasing is comprised of six steps: 1) determining specification, 2) selecting supplier, 3) negotiation and contracting, 4) ordering, 5) expediting and evaluation, and lastly 6) follow-up and evaluation. Each step includes the following activities:

Determining specifications

During this initial stage of the purchasing process, the purchasing requirements are determined. The requirements are generally specified by the end users or middle management in the company. Typical examples of specifications include target budget, required quality and quantities of goods and services to be bought or legal and environmental requirements (van Weele 2010, 32-33).

Selecting supplier

After the purchasing requirements have been established, the purchasing personnel can start looking into the supply market. This is when routines and procedures, such as quotation request and prequalification of suppliers, take place for selecting the best possible supplier. (van Weele 2010, 33-37.)

The first two steps (determining specifications and selecting supplier) are essentially the core of supplier selection process. See Chapter 3 for MML's supplier selection process.

Contracting

After a supplier has been selected, preparing and conducting negotiations with the supplier occur in order to reach an agreement on the price and payment arrangements and any relevant conditions before writing up the contract of sale. Specific commercial and legal terms and conditions will vary from contract to contract. Differences can be caused by, for instance, purchasing policy, company culture, market situation or product characteristics. (van Weele 2010, 37.)

Terms of delivery and terms of payment are key elements in contract agreement. These will be discussed more profoundly in Chapters 2.3 and 2.4.

Ordering

After the terms and conditions of the contract have been agreed and recorded, the order can be placed. Sometimes the contract is, in fact, the purchase order. In other cases like routine buying, buyers will negotiate a call-off agreement covering the materials needed for a longer period of time and then purchase orders are placed against this agreement. This is when contracting and ordering become separate activities. Developing efficient purchase order and handling routines are key. (van Weele 2010, 42-43.)

Expediting and evaluation

Orders should be closely monitored and controlled so that purchased goods arrive in a timely fashion while meeting quality control standards, and that a steady supply is maintained at all times (Valuestreamguru, 2011).

Follow-up and evaluation

The purchaser's role continues long after the new ordered product has been taken into use. For example, settling warranty claims and penalty clauses, keeping product and supplier files up-to-date, rating and ranking suppliers. It is important to have a thorough record of the actual capabilities of each supplier in order to ease the process of selecting future suppliers. All of these activities are indispensable for concluding the purchasing process. (van Weele 2010, 43.)

By the end of the purchasing process, it will become clear which suppliers to establish long-term business relationships with.

2.3 Incoterms® 2010

Understanding different Incoterms rules is key in MML's supplier selection.

The Incoterms rules are key commercial tools developed and maintained by International Chamber of Commerce (ICC). They govern the responsibilities between buyers and sellers under the contract of sale and determine how costs and risks are allocated. Insurance responsibilities and customs formalities are also covered by Incoterms. (O'Connor 2008, 91.)

2.3.1 The basics

Incoterms are divided into four basic groups:

“E” – terms

The goods are placed at the disposal of the buyer at the seller’s premises.

“F” – terms

The buyer is accountable for the cost and risk of the main international carriage.

“C” – terms

The seller pays for the main international carriage, but does not bear the risks during that carriage.

“D” – terms

The seller bears all transport-related costs and risks up to the delivery point at the agreed destination, which may be in the buyer’s country or even at the buyer’s premises.

It is clear that “E” and “F” terms are beneficial to the seller whereas “D” terms are better for the buyer. As for “C” terms, they fall somewhere in between.

The Incoterms® 2010 has 11 rules and they are presented in two distinctive classes:

Rules for any mode or modes of transport

- EXW – Ex Works
- FCA – Free Carrier
- CPT – Carriage Paid To
- CIP – Carriage and Insurance Paid to
- DAT – Delivered At Terminal
- DAP – Delivered At Place
- DDP – Delivered Duty Paid

These rules can be used in cases where a ship is used for part of the carriage, or even when there is *no* maritime transport at all.

Rules for sea and inland waterway transport

- FAS – Free Alongside Ship
- FOB – Free On Board
- CFR – Cost and Freight
- CIF – Cost Insurance and Freight

FOB and CIF are two of the most popular Incoterms rules which will be further examined below.

2.3.2 Free On Board (FOB)

Free On Board (FOB) means that the seller delivers the goods *on board the vessel* proposed by the buyer at the *named port of shipment*. The buyer has to bear all costs and risks of loss of or damage to the goods from the point when the goods are on board the vessel. (International Chamber of Commerce 2010, 203.) Main responsibilities of the buyer and seller are as follows:

The seller's main responsibilities

- The seller must provide the goods and the commercial invoice in compliance with the contract of sale.
- The seller must, at its own expense, package the goods in the manner appropriate for transport.
- FOB requires the seller to clear the goods for export, if applicable.
- The seller pays for transportation of the goods to the port of shipment (port of loading), plus loading costs (Batesman 2007).
- The seller is not accountable for arranging the contract of international carriage. However, the seller may do so if requested by the buyer and it is still at the buyer's risk and expense. (International Chamber of Commerce 2010, 204.)
- The seller is not required to make a contract of insurance but the seller must provide the buyer with information (e.g. risk) that the buyer needs for obtaining insurance (International Chamber of Commerce 2010, 204).

The buyer's main responsibilities

- The buyer must pay the price of the goods as stated in the contract of sale.
- The buyer has to clear the goods for import, pay any import duty or carry out any import customs formalities.
- The buyer (the importer) pays international freight, insurance, unloading costs and transportation from the port of destination to the delivery place (normally the buyer's premises) (Batesman 2007).
- The buyer must give the seller sufficient notice of the vessel name, loading point and the selected delivery time (International Chamber of Commerce 2010, 209).
- All risks are passed from the seller to the buyer when the goods pass the vessel's rail at the port of shipment (port of loading).

Internationally, the term specifies the port of loading, as an example, FOB Shanghai. In North American standards the term FOB has a slightly different meaning and it is important to understand the meaning of two terms – *FOB origin* and *FOB destination*. FOB origin indicates the buyer pays shipping cost and takes responsibility of the goods when the goods leave the seller's premises. FOB destination indicates the seller will pay shipping costs and remain responsible for the goods until the buyer takes possession. (Wikipedia 2011, according to Averkamp 2006).

To avoid any misunderstanding or confusion with different standards, one should make clear in the contract, through such words as FOB Shanghai, Incoterms® 2010.

2.3.3 Cost, Insurance and Freight (CIF)

Cost, Insurance and Freight means the seller delivers the goods on board the vessel. The seller must arrange and pay the necessary costs and freight to bring the goods to the *named port of destination*, but the risk of loss of or damage to the goods passes to the buyer when the goods are on board the vessel. (International Chamber of Commerce 2010, 221.) Main responsibilities of the buyer and seller are as follows:

The seller's main responsibilities

- The seller must provide the goods and the commercial invoice in compliance with the contract of sale.
- The seller must arrange and procure a contract for the carriage of the goods from the agreed point of delivery (usually the seller's premises) to the named port of destination.
- The seller is required to obtain and pay for cargo insurance (complying with the minimum cover provided by *Clauses C* of the Institute Cargo Clauses) which entitles the buyer to claim directly from the insurance company (International Chamber of Commerce 2010, 226).
- The seller bears all risks of loss of or damage to the goods until they have been placed on board the vessel.
- If applicable, the seller must clear the goods for export at its own expenses.

The buyer's main responsibilities

- The buyer must pay the price of the goods as stated in the contract of sale.
- If the buyer wishes to have the protection of greater cover (i.e. *Clauses A & B*), the buyer would either need to agree with the seller as explicitly as possible or to make his/her own extra insurance arrangements (O'Connor 2008, 98).
- The buyer bears all risks of loss of or damage to the goods from the time they have been placed on board the vessel.
- The buyer has to bear unloading costs unless such costs and charges were for the seller to pay as stated in the contract of carriage.
- The buyer has to clear the goods for import, pay any import duty or carry out any import customs formalities.
- The buyer must take delivery of the goods when they reach the port of destination.

2.4 Payment mechanism

There are four basic payment methods available in international trade: 1) cash in advance, 2) documentary (letter of) credit, 3) documentary collections, and 4) open account. These are ranked in order from most advantageous to the seller to most advanta-

geous to the buyer. (Hinkelman 2008, 11.) The seller wants to make sure he gets paid while the buyer wants to make sure he gets the merchandise as ordered.

The bottom line is if both parties seek for a high level of payment security, then payment methods will be relatively more costly. Conversely, if payment security is not a priority, because the parties know or trust each other, then cheaper, simpler payment methods can be used. (Sénéchal & Collyer 2008, 147).

The first two payment methods are applicable to MML; hence these are described in greater detail below. The latter two methods are only discussed briefly.

2.4.1 Cash in advance

This method of payment provides the greatest security for seller but the greatest risk for buyer.

The way how it works is simple. The buyer pays the seller before shipment of the goods ordered. The payments are made either by bank draft or cheque or through a wire payment to the bank account as specified by the seller. (Hinkelman 2008, 12.)

Generally cash in advance is required by

- sellers who have unique or high demand products,
- sellers receiving orders from unknown buyers in unstable countries,
- small sellers needing help to finance the manufacturing process of a large order and
- sometimes this payment method is used for shipping a small sample order to a buyer (see Chapter 5.2 for an example).

Overall, this method of payment requires the buyer to have a high degree of confidence and trust in the ability and willingness of the seller to deliver the goods as ordered. (Hinkelman 2008, 11.)

2.4.2 Documentary (letter of) credit

After cash in advance, this is usually considered the next safest method for seller. Even though this provides security and almost equal risk for both buyer and seller, the buyer has to take care of additional costs for the handling of the documentary credit.

In short, “a documentary letter of credit is a bank’s promise to pay a seller on behalf of the buyer so long as the seller complies with precisely defined terms and conditions specified in the credit.” (Hinkelman 2008, 13.) A documentary letter of credit is often abbreviated as L/C. There are many variations of L/C. The author only wishes to discuss elements relevant to MML’s purchasing operations.

This method of payment requires long and cumbersome preparations. To begin with, the exporter (seller) and importer (buyer) agree on a contract of sale. The importer then goes to its bank and requests to open a letter of credit. In order to open a L/C, the importer is required to fill out an application form which should be in conformity with the contract of sale (see Appendix 2 for an example from MML). Before approving the application, the importer’s bank (also known as the issuing bank) will first check the applicant’s financial situation and credibility. When the application is approved, the issuing bank will issue the credit and request exporter’s bank (confirming bank) to add its own irrevocable commitment to pay under the terms of the credit. If the exporter agrees with everything in the credit, the exporter then proceeds to ship the goods (or to start production of goods and then ship the goods). When the goods are delivered to the transport carrier, the exporter receives a transport document which, together with the other stipulated documents, is presented to the confirming bank for payment. The confirming bank will then examine the documents to see if they comply with the terms in the credit. If everything looks alright, the confirming bank will forward the documents to the issuing bank and at the same time ask for reimbursement. The issuing bank will examine the documents and if it also agrees that everything looks alright, it will reimburse the confirming bank. The issuing bank will then release the documents to the applicant, who can then use the bill of lading to obtain the goods from the carrier. (Sénéchal and Collyer 2008, 168-179.)

This payment method is most commonly used in international trade because they provide a high level of security for both the buyer and the seller. This method, however,

requires absolute consistency and accuracy when preparing and submitting documents for payment.

2.4.3 Documentary collections

Documentary collections provide security and almost equal risk for both buyer and seller.

“The seller ships goods to the buyer but forwards shipping documents to the forwarding bank for transmission to the buyer’s bank. The buyer’s bank is instructed not to transfer the documents to the buyer until payment is made (this is known as documents against payment, D/P) or upon guarantee that payment will be made within a specified period of time (documents against acceptance, D/A).” (Hinkelman 2008, 14.) The main difference between this method of payment and letters of credit is that banks involved in the transaction do not guarantee payment but act only as collectors of payment. (Hinkelman 2008, 14.) For this reason, documentary collection is less desirable from the seller’s point of view.

This payment method is suitable for buyers who wish to purchase goods without risking prepayment and without having to go through complicated letters of credit procedures. In addition, banks usually charge less because it is easier to use. (Hinkelman 2008, 14.)

Usually documentary collections are used when the buyer and seller have an established and ongoing business relationship.

2.4.4 Open account

This is the best payment option for the buyer as the buyer is exposed to minimal amount of risk. On the other hand this option presents the greatest risk for the seller.

To put it simply, purchase on an open account means the buyer buys now and pays later. The buyer agrees to pay for goods ordered within a specified time after their shipment. Terms are typically 30, 60 or 90 days. The payments are made either by bank draft or

cheque or through a wire payment to the bank account specified by the seller. (Hinkelman 2008, 15.)

This payment method is generally used in

- domestic trade or
- when goods are shipped to a foreign branch or subsidiary of a multinational company or
- when there is a high degree of trust between seller and buyer.

Overall, if the transaction is with an unknown buyer, the seller is recommended to find an alternative method of payment. Buyers should not expect sellers to agree to this method of payment in a newly established business relationship. (Hinkelman 2008, 15.)

2.5 Pro forma invoice

A pro forma invoice is sent by a seller to a buyer, it is commonly used as a preliminary invoice with a quotation. It includes information such as general conditions, product description, -quantity, -value, -weight and transportation costs on the front side of the document. The basic idea is that the buyer can see in the pro forma invoice exactly what it will pay for if it goes through with the deal (Bertasi 2008, 26). The pro forma invoice should mirror the commercial invoice precisely.

In practice, pro forma invoice is more than just a preliminary invoice with a quotation, see Chapter 3.3.

3 MML SUPPLIER SELECTION PROCESS

3.1 Overview

MML's supplier selection process is developed based on the first two steps of van Weele's model. Minor modifications to van Weele's model are, however, required in order to better suit the company.

Firstly, a modification is required in the internal customer part of the model. As said earlier, MML's primary task is to make purchases abroad on behalf of other businesses and individuals. In other words, purchases are made for external parties. To accommodate that, a modification must be made to van Weele's purchasing process model by replacing the internal customer component with *external client* (Figure 2).

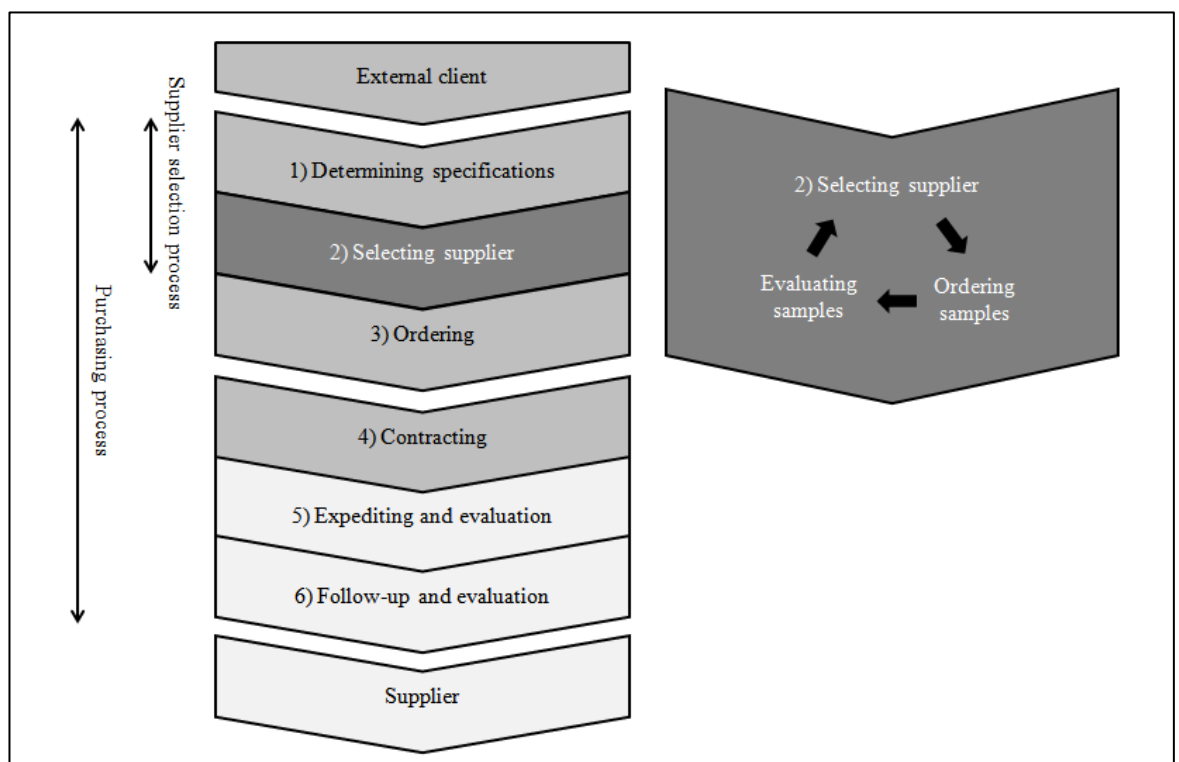


FIGURE 2. MML supplier selection process and purchasing process (Koivisto 2011)
Modified from purchasing process model (van Weele 2010, 9)

Secondly, additional sub-process is created under the selecting supplier step. As can be seen from Figure 2, the model has been expanded by adding *ordering samples* and *evaluating samples*.

With this supplier selection process in place, the company will then be able to carry on and complete its purchasing process all the way to the end as discussed earlier. In the following chapters (3.2 to 3.6) the author will demonstrate how van Weele's model is applied in order to develop MML's supplier selection process and make way for completing MML's purchasing process.

3.2 Determining specifications

A meeting is normally arranged between MML's CEO and client. Matters to be discussed include:

Product requirements

Specific requirements such as country of origin, materials, technical details and quality assurance standards are required to ensure getting the right product to the client. On some occasions the client may present samples or technical drawings to supplement their requirements.

Product quantity

Knowing the exact amount can be useful for negotiating with suppliers at a later stage. It also helps to find out whether it is a one-off deal or if the client intends to cooperate in the long run.

Time allowance

It is important for the company to know how soon the client needs to obtain the products.

Target price

The client should indicate an acceptable price range. This will help MML's purchasing personnel with supplier selection later on.

3.3 Selecting supplier

This step covers the largest number of activities. It is fundamental to get this step right before continuing any further because the rest of the purchasing tasks beyond this point are dependent on this. The activities in this step aim to narrow down a large group of potential suppliers to find the top supplier, as illustrated in Figure 3.

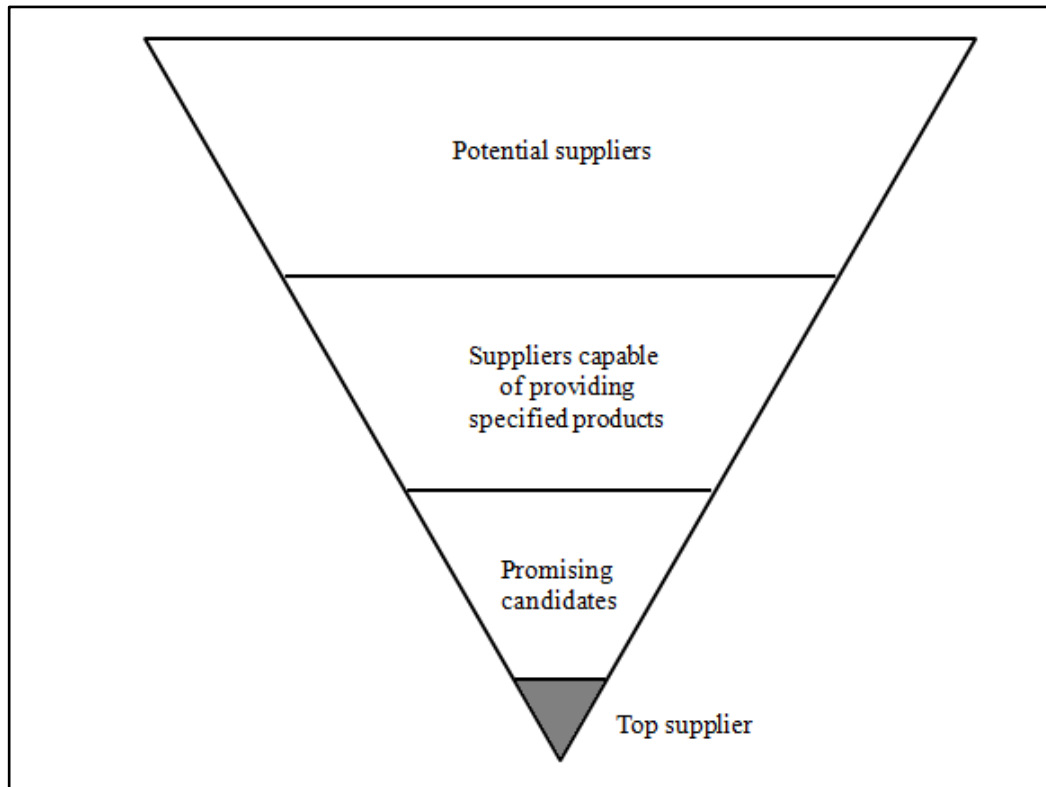


FIGURE 3. Supplier selection (Koivisto 2011)

The purchasing personnel should first determine whether to use personal connections to locate potential suppliers or, alternatively, search directly via the Internet using keywords. In the Far East, it is always easier to do business if one has some connections.

Once potential suppliers have been identified, they are contacted to see if they are able to meet the specifications set by the client. It is not always possible to find the perfect supplier. The goal here is try to find one fulfilling most of the client's wishes e.g. product requirements and -quantity. The purchasing personnel may demand proof, such as quality assurance certificates or technical data from potential suppliers if they are required by the client.

Next, those suppliers capable of providing the specified products are contacted for quotation. Following topics are to be discussed:

Price and terms of delivery

Suppliers may provide multiple quotations with different prices depending on the terms of delivery. Different delivery terms have already been discussed in Chapter 2.3.

Terms of payment

Suppliers generally propose a small percentage of cash in advance as a deposit and then the rest as documentary letter of credit (L/C). It is important to find out if this can be negotiated as 100% L/C instead, especially for high-value transactions. The most common payment terms have already been examined in Chapter 2.4.

Sampling

Low-value products are generally provided at the supplier's own expenses but freight is usually paid by the client (in this case MML or the company's client). Some suppliers may offer both the sample and the freight free of charge.

Volume

Some companies may offer better prices for high volume orders. When enquiring, indicating the intended purchase volume is crucial.

Currency

One way to find out which currency is accepted by the supplier is to ask for a quotation. It is preferable to use Euro as the medium of exchange but in the Far East for example the US dollar is more commonly used.

Based on the received quotations, a short list of promising candidates is assembled. Some offers may not be considered due to too high prices, especially if the price is well above the client's specification. MML only uses L/C for high-value transactions while cash in advance method is reserved for low-value transactions only. This usually means excluding suppliers which are unable to provide L/C as the payment term. Sampling, volume and currency issues are additional information assisting in decision making.

Now that a short list of promising candidates has been assembled, they need to be compared in order to find out which offer is ultimately the best. This may involve estimating total price for each offer by adding up all the costs, such as taxes, quotation from freight forwarder, and FOB price from the supplier. While the choice of supplier is largely based on the price, other factors such as free samples, company reputation and even perceived professionalism of the supplier's personnel may affect the decision.

When the top supplier has been identified, a sample is ordered for further evaluation. A pro forma invoice is issued to MML serving as a contract which confirms the order of samples. The contract in this context normally contains information such as product description, order quantity, payment information and freight arrangement for the samples. Once the supplier receives the payment, the samples will be shipped. All of these activities are a part of the new step: *ordering samples* (see Figure 2).

Upon receiving the samples, they are sent to the client for inspection and testing (i.e. *evaluating samples*). Every client has their own way of dealing with sampling. If the client is happy with the samples and confirms to place an order, the supplier selection step concludes here. On the contrary if the client is unhappy with the samples, new ones will have to be ordered from either the same supplier or the next best alternative supplier and then the client will conduct the evaluation again. The two new steps are repeated again and again in a loop until the client finds the right supplier (see Figure 2).

The supplier selection process ends here. The next four steps are a part of the whole purchasing process.

3.4 Ordering

In van Weele's purchasing process model, ordering only comes after contracting because the underlying assumption is so that a contract is drawn up covering a specified period of time for certain routine products. As a result, there is no need to write a new contract every time when someone needs to make a routine order.

In MML's case this step usually comes before the contracting step. This is because the company is still new to most of its suppliers, hence every order is treated separately.

The company confirms an order by email and then a contract is drawn up based on all the *preliminary* terms in the selecting supplier step.

Once a long-term relationship has been established with a supplier, the company can proceed like van Weele's model – ordering comes after contracting. As an example to demonstrate this, after years of negotiations, MML has been appointed as the sole distributor for Lug-All products in Finland. Because a long-term contract is in place, the company only needs to send an email to Lug-All to confirm its order each time.

3.5 Contracting

In van Weele's purchasing process model, negotiations take place during contracting. However, in MML's case all the details required for a contract have in fact already been negotiated by the purchasing personnel (with some pointers from the CEO) in the previous steps. Contracting is used to make the agreement official.

The author has not been given access to any of MML's previous contracts. For an example of MML's most recent contract of sale prepared by the author, please see Appendix 8.

Opening a L/C is a part of the contracting step because in order to complete a L/C application form, a contract of sale (or order confirmation) needs to be presented to the bank as well when submitting the application. The application form contains a lot of information which is tied to the contract. For details on filling out a typical L/C application form for MML, please see Appendix 2.

The remaining two steps of the purchasing process (i.e. expediting & evaluation, and follow-up & evaluation) are outside the scope of this Thesis.

3.6 Benefits of MML supplier selection process

As with any process in general, compared to doing things in a less organised manner, a process enables users to work faster and more efficiently while reducing errors and

making it easier to follow up. Since MML is dealing with a large variety of product groups, the process has to be applicable in every situation.

Having the supplier selection process in place will save a lot of time because all the decisions which need to be made are dictated in the process already. Saved time translates into lower costs through less work hours spent, and in addition, quicker results benefit the client as well. Exactly how much time and money the process actually saves would require a broad and lengthy study with comparative analysis. For MML, it is sufficient that the process helps to speed up the work and saves their time.

The supplier selection process was specifically developed for meeting MML's needs. The company insists on getting certain elements right before continuing any further. For instance, terms of delivery and terms of payment are normally negotiated during the contracting step.

4 MML PRODUCT CASES: DETERMINING SPECIFICATIONS

4.1 Product case: Work overall

The client, X¹ Oy is a small company specialising in repair and maintenance of ships and boats.

Work overalls are required when employees perform their tasks on sight. The client is hoping to get some work overalls for its employees as well as distributing the garments nationwide in Finland.

The client has provided the following information to MML's CEO:

Product requirements

The work overall should be in navy blue colour, made of 100% cotton with fabric weight of 280gsm (grams per square meter) at least. The higher the gsm means the thicker the fabric. To make garment research easier for the purchasing personnel, a sample of the work overall has been provided by the client serving as a reference model (see Picture 1 below). Appendix 3 shows detailed features of the sample e.g. metal buttons, back pockets, pockets for pens and rulers, which are all required by the client. This model of work overall is mainly used to provide a barrier against dirt hence the fabric does not require any special chemical treatments. The client is only seeking to order the most popular European sizes: 52, 54, 56 and 58.

¹ Confidential information



PICTURE 1. Work overall provided by the client (Photo: Olivia Koivisto 2011)

Product quantity

For the first shipment five hundred pieces of work overalls will be ordered of each size, these add up to two thousand pieces in total. If everything goes well more work overalls will be ordered at a regular interval of three months.

Target price

The total cost of each garment should be no more than X^2 Euros. Apart from the actual cost of the garment itself, this is counting in costs such as taxes, freight and insurance as well.

Time allowance

There is no specified deadline but it should be handled as quickly as possible.

² Confidential information

4.2 Product case: Rebar tier

The client, X³ Oy is a reputable Finnish company providing under floor heating systems, installation and marketing. In order to ensure proper assembly of floor heating pipes, the company works closely with builders during the construction phase.

Automatic rebar tiers are needed for securing the heating pipes to rebar flooring (see Picture 2 below for illustration).



PICTURE 2. Heating pipes secured with a rebar tier (Max USA Corp 2011)

The client has provided the following information to MML's CEO:

Product requirements

There are different sizes of rebar tiers available on the market. Basic models are the smallest (in terms of physical size and tying diameter) and most commonly used in construction. The client, however, is uncertain which model will suit their needs. It is agreed that a basic model will be ordered for field testing. If it cannot fulfil the client's needs, a larger one will be ordered.

³ Confidential information

The tool should be flexible in terms of its tying diameter. The greater the tying diameter, the wider the rebar size or the thicker the heating pipes can be (see Appendix 4 for illustration). The tool should also bear the CE mark. The letters *CE* stand for *Conformité Européenne* (European Conformity); it is a mandatory conformity mark for products placed on the market in the EEA (European Economic Area).

Product quantity

On average, the company needs twenty to thirty rebar tiers per year and three thousand rolls of tying wires are required for every three months.

Target price

A rebar tier can cost up to X⁴ Euros per unit on the Finnish market. The client wants to find something more affordable.

Time allowance

The client has not specified a deadline for this product.

4.3 Product case: Product X⁵

This chapter contains highly confidential information. The contents have been removed at request of the commissioner.

⁴ Confidential information

⁵ Confidential information

5 MML PRODUCT CASES: SELECTING SUPPLIER

5.1 Product case: Work overall

The author began by using Google Web Search to look for potential suppliers. Keywords⁶ such as work clothes, work overall and work uniform were used. The author found that a large number of manufacturers for this type of product were located in China while only a small number were found in other countries such as Pakistan and Vietnam.

Enquiries were made by email and phone to roughly two dozen potential suppliers in these countries. No responses were received from anyone in Pakistan or Vietnam, thus the author decided to focus her search inside the Chinese market.

The author also discovered that not all large manufacturers in China export their products abroad. For this reason the author decided to use commercial trading websites such as Made-in-China (www.made-in-china.com) and Alibaba (www.alibaba.com) to assist her in finding manufacturers which operate in the global market. When searching through these websites, not only the author used different key words but both English and Chinese languages were used to ensure getting more search results. The author first went through the results and picked out the most relevant ones, especially those which have their own company websites. It is worth to mention here that not all companies listed under Made-in-China or Alibaba have their own websites. Next, the company websites were evaluated based on how professional they looked and whether their product range matched MML's needs. A list of potential suppliers were then identified and enquires were made. In addition to the potential suppliers found over the Internet, one more was found through the author's own connection.

Six different manufacturers responded and they all demanded to see the actual sample of the work overall (provided by MML's client) in order to give a more accurate quotation. It was not possible to send samples to every single manufacturer just to get a quotation. The author was suggested by one of the manufacturers to take detail photographs of the sample garment and do detailed measurements.

⁶ See Appendix 1 for a complete list of keywords.

<i>Manufacturers</i> ⁷	<i>FOB in USD</i> ⁸	<i>CIF Turku in USD</i> ⁹	<i>Accepting L/C</i>	<i>Free sample</i>
Company A	X	X	Yes	Yes
Company B	X	X	Yes	No
Company C	X		No	No
Company D	X		No	Yes
Company E	X		Yes	No
Company F	X			

TABLE 1. Received work overall quotations

The six manufacturers' quotations can be seen in Table 1. As mentioned in Chapter 4.1, the total cost of each garment should be kept under X Euros, which was roughly X USD. Based on the FOB prices, Company E and F were out because the quotes were already very high before counting in other costs such as freight, insurance and taxes. Next, the list of manufacturers was narrowed down on the basis of payment terms they had offered. Even though both Company C and D had very attractive offers, they were dropped from the list because they were not willing to accept L/C as the payment term. The author then asked for CIF Turku prices from the remaining two candidates.

In an earlier research the author found that if MML were to organise its own sea transport instead of settling with CIF, it would save X USD per garment. Since the order volume for this shipment is rather small and the received quotes for CIF are reasonable, it makes sense to use CIF instead of FOB.

In the end, Company A was chosen as the top supplier over Company B due to a number of reasons:

- The company offered a better quote.
- The company showed professionalism by designing the size chart from scratch (see Appendix 3).
- Customised sample garment and delivery were free of charge.

⁷ Confidential information

⁸ Confidential information

⁹ Confidential information

- The sample garment was perfectly made.
- Their staff always responded promptly and answered all questions.
- They showed willingness to cooperate.

Since the client was happy with the sample garment, there was no need to repeat the process of *ordering samples* and *evaluating samples*.

The research method used in this case is applicable to any other cases of the same product group i.e. work apparel. For example, work gloves.

5.2 Product case: Rebar tier

The author used Google Web Search to locate potential suppliers. Keywords¹⁰ such as rebar tier and rebar tying machine were used. Based on initial findings a more thorough search was performed using Chinese and Japanese keywords. It appeared that majority of the suppliers were located in China and only one was found in Japan. The author decided to focus her research in the Chinese market because the Japanese company was found to have an importer in Finland already.

While browsing through websites of different suppliers the author noticed that many claimed themselves to be manufacturers, but in fact they were trading companies. The author was explicitly instructed to look for manufacturers only. After carefully examining all the websites the author decided to make enquiries to six potential suppliers.

Five manufacturers responded and their quotations can be seen in Table 2 below. All the manufacturers were able to provide attractive prices and meet the CE marking criteria (as stated in Chapter 4.2) for the basic rebar tier model. Since the client was not completely certain whether the basic model would meet their needs, the author was instructed to first order a sample. Company A confirmed using L/C as a medium of exchange, they showed professionalism in their services and was the only manufacturer with ISO9001 quality management system certification, thus a sample was ordered from

¹⁰ See Appendix 1 for a complete list of keywords.

them. Company A confirmed the sample order by issuing a pro forma invoice (see Appendix 6) which served as the contract for this transaction.

<i>Manufacturers¹¹</i>	<i>FOB in USD¹² (per unit)</i>	<i>Accepting L/C</i>	<i>Large model available</i>
Company A	X	Yes	Yes
Company B	X	Negotiable	No
Company C	X		No
Company D	X		No
Company E	X	No	No

TABLE 2. Received rebar tier quotations

After a few rounds of field tests, the client revealed the first sample was unable to meet their needs. The client felt that a larger rebar tier model would be required. For this reason the author examined all product catalogues she had previously received and compared their technical data. As Company A was the only one providing larger model, this manufacturer was the obvious choice.

This project remains open and has not proceeded any further.

The research method used in this case is applicable to any other cases of the same product group i.e. rebar tools. For example, rebar cutter and rebar bender.

5.3 Product case: Product X¹³

This chapter contains highly confidential information. The contents have been removed at request of the commissioner.

¹¹ Confidential information

¹² Confidential information

¹³ Confidential information

6 MML PRODUCT CASE: ORDERING AND CONTRACTING

6.1 Product case: Work overall

X¹⁴ Oy signalled MML that they would like to order two thousand pieces of work overalls from Company A. The order was initiated with an email message sent to the supplier. The supplier confirmed the order by issuing a pro forma invoice (see Appendix 7) to MML.

As can be seen in the pro forma invoice the price for work overall rose to X¹⁵ USD (increased from X USD). Unstable supply of cotton led to an increase in fabric prices. MML agreed to the price change.

Even though both MML and Company A had already agreed to use L/C as method of payment, Company A felt that it would save costs for both parties if telegraphic transfer (T/T) was used instead. After several rounds of tough negotiations, MML agreed to Company A's proposal by making 10% deposit prior to the shipment and the remaining 90% payment after receiving and inspecting the goods.

The author was then instructed to finalise the case by preparing a contract of sale for both parties to sign (see Appendix 8). The contract contains twelve clauses and it takes into account the changes made to the pro forma invoice. The clauses are briefly described below:

- Clause 1 confirms the document as *the agreement* between the two parties.
- Clause 2 confirms delivery and payment terms.
- Clause 3 shows the seller's bank information.
- Clause 4 provides details concerning the price of the goods.
- Clause 5 shows detailed description of the goods.
- Clause 6 describes the inspection criteria. The inspection is to be carried out by MML upon receiving the goods.

¹⁴ Confidential information

¹⁵ Confidential information

- Clause 7 describes what counts as defective goods and how to settle the costs of defective goods.
- Clause 8 describes the seller's obligations if a force majeure event occurs.
- Clause 9 explains events which are considered a breach of agreement.
- Clause 10 entails both the seller and buyer's rights when a breach of agreement occurs.
- Clause 11 explains that this agreement is continuous, as well as necessary steps for terminating the agreement.
- Clause 12 mainly explains how the agreement is delivered to both parties.

With this agreement in place, MML will only need to send an email to Company A from now on for placing any orders in the future. This means that MML's purchasing process will then be in the same order as van Weele's model – ordering comes after contracting.

7 CONCLUSION AND RECOMMENDATION

In the beginning of the Thesis, three goals were set. The first goal was to locate suitable suppliers from the Far East for a selection of products. This was achieved mainly by spending hours of research in the Internet. It became clear to the author that there were far more manufacturers in China operating in the global market compared to other Far East countries. However, certain industries are showing signs of moving to even cheaper countries as the costs in China rise with the economic growth. For example, in the future it will be wise to keep an eye on textile products from countries such as Vietnam, Pakistan and India as viable alternatives.

The second goal was to develop an effective supplier selection process for MML. This was created in parallel with the first goal, effectively testing the process with MML's product cases (Chapters 4 to 6) and further improving it based on the learnings. As a final result of this development cycle, the supplier selection process is presented in Chapter 3. The third goal was to address ordering and contracting activities of MML. Essentially the second goal paved the way for ordering and contracting activities. A product case was presented in order to demonstrate the practical side of the third goal.

As MML continues to grow and the product selection increases, selecting suitable suppliers becomes even more important. In the author's opinion, the theories and actual product cases presented in the Thesis can be used as a learning material for new personnel joining MML's purchasing team. The Thesis will serve as a guide for making important decisions when selecting suppliers.

The whole process of research, analysis and writing the Thesis was a valuable learning experience. The author encountered difficulties in the beginning, including understanding assigned tasks, putting prior knowledge to use and making decisions under limited guidance. Through various challenges professional skills were developed, such as communicating on a business level in different languages and analytical skills concerning purchasing and logistics. Overall, it has been an interesting but rather challenging experience. The Author believes that she could have done more for the company if there was more time, guidance and information available from MML.

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¹⁶ A number of references have been removed at request of the commissioner

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9 APPENDIXES

9.1 Appendix 1: Keywords

<i>English</i>	Work overall, work uniform, work clothes, work coverall
<i>Chinese</i>	X ¹⁷

Keywords used for searching work overall

<i>English</i>	Rebar tier, rebar tying tool, rebar tying machine, cordless rebar tier
<i>Chinese</i>	X ¹⁸
<i>Japanese</i>	X ¹⁹

Keywords used for searching rebar tier

<i>English</i>	X ²⁰
<i>Chinese</i>	X ²¹

Keywords used for searching product X

¹⁷ Confidential information

¹⁸ Confidential information

¹⁹ Confidential information

²⁰ Confidential information

²¹ Confidential information

9.2 Appendix 2: L/C application form²²

²² Source: MML-Imports Ltd, 2011. Confidential information.

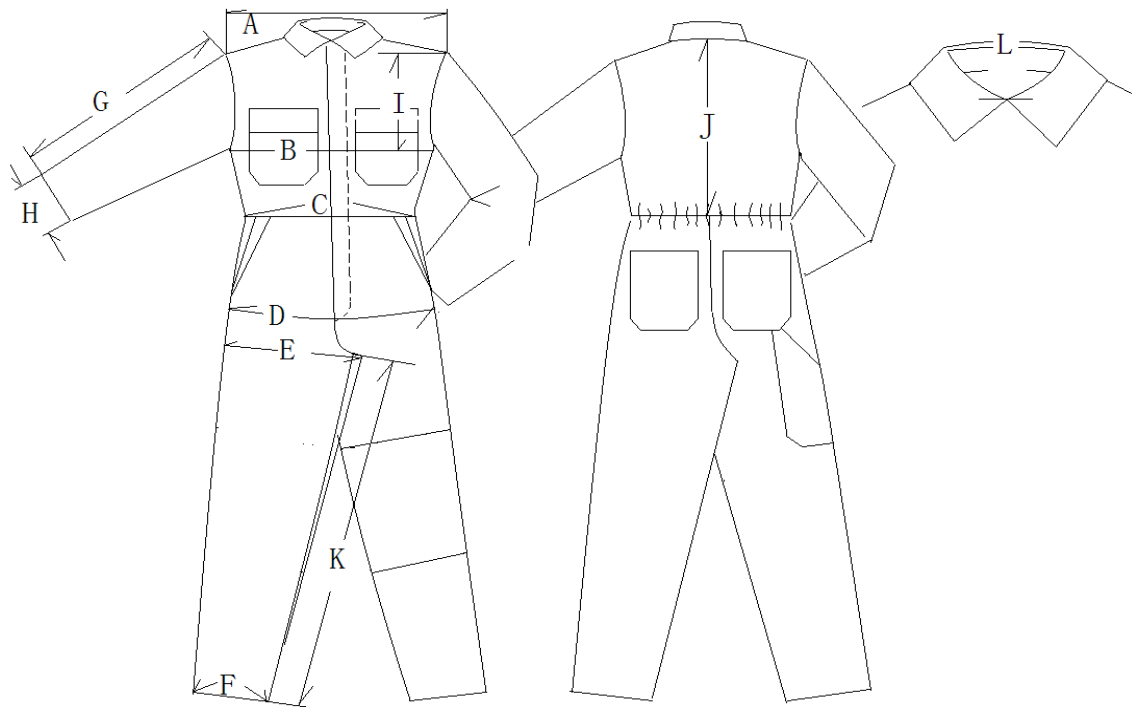
9.3 Appendix 3: Work overall details and size chart²³

1(2)



²³ Source: MML-Imports Ltd, 2011

		52 ²⁴	54 ²⁵	56 ²⁶	58 ²⁷	Tolerance ²⁸
A	<i>1/2shoulder width</i>	X	X	X	X	X
B	<i>1/2chest width</i>	X	X	X	X	X
C	<i>1/2waist relax</i>	X	X	X	X	X
	<i>1/2waist strength</i>	X	X	X	X	X
D	<i>1/2seat width</i>	X	X	X	X	X
E	<i>1/2thigh width</i>	X	X	X	X	X
F	<i>1/2bottom</i>	X	X	X	X	X
J	<i>back length</i>	X	X	X	X	X
G	<i>sleeve length</i>	X	X	X	X	X
I	<i>arm hole</i>	X	X	X	X	X
H	<i>1/2sleeve opening</i>	X	X	X	X	X
K	<i>inseam</i>	X	X	X	X	X
L	<i>collar</i>	X	X	X	X	X



²⁴ Confidential information
²⁵ Confidential information
²⁶ Confidential information
²⁷ Confidential information
²⁸ Confidential information

9.4 Appendix 4: Rebar tiers²⁹

Basic model 9-21mm tying diameter

Medium model 20-40mm tying diameter

Large model 30-50mm tying diameter

²⁹ Source: MML-Imports Ltd, 2011. Confidential information.

9.5 Appendix 5: Product X³⁰

1(8)

Drawing X

³⁰ Source: MML-Imports Ltd, 2011. Confidential information.

Drawing X

Drawing X

Drawing X

Drawing X

Drawing X

Drawing X

Drawing X

9.6 Appendix 6: Pro forma invoice issued by Company A³¹

³¹ Source: MML-Imports Ltd, 2011. Confidential information.

9.7 Appendix 7: Pro forma invoice issued by Company A³²

³² Source: MML-Imports Ltd, 2011. Confidential information.

9.8 Appendix 8: Contract of sale³³

1(6)

³³ Source: MML-Imports Ltd, 2011. Confidential information.

